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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,087	07/14/2003	John D. McGee	M6839 (155*357)	7412

45847 7590 05/05/2005

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EXAMINER	
FEELY, MICHAEL J	

ART UNIT	PAPER NUMBER
1712	

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/620,087	MCGEE ET AL.	
	Examiner	Art Unit	
	Michael J. Feely	1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11-17 and 25-29* is/are allowed.

6)☒ Claim(s) *1-8,18-22,30-34,36,40 and 41* is/are rejected.

7)☒ Claim(s) *9,10,23,24,35 and 37-39* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1203,0204*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8, 18-22, 30-34, 36, 40, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Gibson et al. (US Pat. No. 4,413,073).

Regarding claims 1-8, 40, and 41, Gibson et al. disclose: ***(1)*** a process for making an *auto-depositing* epoxy-based dispersion (Abstract; column 5, lines 29-47), the process comprising the steps of:

(a) dissolving and/or reducing an epoxy pre-polymer with at least one ethylenically unsaturated monomer to form a mixture (column 5, lines 29-47; column 3, lines 9-16; column 3, line 56 through column 4, line 2);

(b) dispersing the mixture of step (a) in water with at least one surfactant to form a fine particle dispersion (column 5, lines 29-47 and 3-11); and

(c) polymerizing the at least one ethylenically unsaturated monomer contained in the fine particle dispersion to form an epoxy dispersion (column 5, lines 29-57; column 2, lines 27-45);

wherein at least one soluble initiator and/or at least one organic soluble initiator is added prior to step (c) (column 5, line 48 through column 6, line 4) and wherein at least one latent curing agent

is incorporated into the mixture before the at least one ethylenically unsaturated monomer is polymerized (column 2, line 56 through column 3, line 2; column 3, lines 9-16);

(2) wherein step (b) comprises the steps of: dispersing the mixture of step (a) in water with the at least one surfactant to form a crude dispersion (column 5, lines 29-47 and 3-11); and mechanically dispersing the crude dispersion to form a fine particle dispersion (column 6, lines 14-18);

(3) wherein at least one water-soluble initiator is added after step (a) and prior to step (c) and/or at least one organic soluble initiator is added before step (b) (column 5, line 48 through column 6, line 4);

(4) wherein step (c) is carried out by heating the fine particle dispersion (column 3, lines 9-16);

(5) wherein the epoxy pre-polymer is derived from an epoxy resin prepared by reacting a diglycidyl ether of a polyhydric alcohol (column 3, lines 9-16; Examples 4-5);

(6) wherein the epoxy pre-polymer is derived from one or more epoxy resins conforming to the general chemical structure *(see claim for structure)* (column 3, lines 9-16; Examples 4-5);

(7) wherein at least one further component is added prior to step (c), wherein the at least one further component is selected from the group consisting of curing agents, coalescing solvents, level agents, and mixtures thereof (column 2, line 56 through column 3, line 2; column 3, lines 9-16; column 6, lines 5-18);

(8) wherein the at least one ethylenically unsaturated monomer is selected from the group consisting of acrylic acid, methacrylic acid, esters of acrylic acid, esters of methacrylic acid,

acrylonitrile, methacrylonitrile, acrylamide, methacrylamide, and styrene (column 3, line 56 through column 4, line 2);

(40) a stable *auto-depositing* epoxy dispersion produced according to the process of claim 1 (column 2, lines 27-45); and

(41) an *auto-depositing* coating composition comprising: (a) at least one epoxy dispersion produced by the process of claim 1 (column 5, line 29 through column 6, line 18); (b) water (column 5, line 29 through column 6, line 18); and (c) at least one autodeposition accelerator (column 5, line 29 through column 6, line 18; column 2, line 27 through column 3, line 16).

Regarding claims 18-22, Gibson et al. disclose: ***(18)*** a stable *auto-depositing* epoxy dispersion (Abstract; column 5, lines 29-47), comprising:

(a) an epoxy pre-polymer (column 5, lines 29-47; column 3, lines 9-16);

(b) at least one ethylenically unsaturated monomer polymerized through a heterophase polymerization process (column 3, line 56 through column 4, line 2; column 5, lines 29-57; column 2, lines 27-45);

(c) at least one curing agent (column 2, line 56 through column 3, line 2; column 3, lines 9-16);

wherein the epoxy dispersion further comprises particles and components (a), (b), and (c) are all present in one or more of the dispersion particles (column 2, lines 27-45);

(19) wherein the epoxy pre-polymer is derived from an epoxy resin prepared by reacting a diglycidyl ether of a polyhydric alcohol (column 3, lines 9-16; Examples 4-5);

(20) wherein the epoxy pre-polymer is derived from one or more epoxy resins conforming to the general chemical structure *(see claim for structure)* (column 3, lines 9-16; Examples 4-5);

(21) further comprising at least one further component selected from the group consisting of colorants, pigments, coalescing solvents, level agents, and mixtures thereof (column 6, lines 5-18); and

(22) wherein the at least one ethylenically unsaturated monomer is selected from the group consisting of acrylic acid, methacrylic acid, esters of acrylic acid, esters of methacrylic acid, acrylonitrile, methacrylonitrile, acrylamide, methacrylamide, and styrene (column 3, line 56 through column 4, line 2).

Regarding claims 30-34, Gibson et al. disclose: ***(30)*** a *auto-depositing* coating composition (Abstract; column 5, lines 29-47), comprising:

(a) at least one epoxy dispersion comprising: (i) an epoxy pre-polymer (column 5, lines 29-47; column 3, lines 9-16); (ii) at least one ethylenically unsaturated monomer polymerized through a heterophase polymerization process (column 3, line 56 through column 4, line 2; column 5, lines 29-57; column 2, lines 27-45); (iii) at least one curing agent (column 2, line 56 through column 3, line 2; column 3, lines 9-16); wherein the epoxy dispersion further comprises particles and components (i), (ii), and (iii) are all present in one or more of the dispersion particles (column 2, lines 27-45);

(b) water (column 5, line 29 through column 6, line 18); and

(c) at least one autodeposition accelerator (column 5, line 29 through column 6, line 18; column 2, line 27 through column 3, line 16);

(31) wherein the epoxy pre-polymer is derived from an epoxy resin prepared by reacting a diglycidyl ether of a polyhydric alcohol (column 3, lines 9-16; Examples 4-5);

(32) wherein the epoxy pre-polymer is derived from one or more epoxy resins conforming to the general chemical structure *(see claim for structure)* (column 3, lines 9-16; Examples 4-5);

(33) further comprising at least one further component selected from the group consisting of colorants, pigments, coalescing solvents, level agents, and mixtures thereof (column 6, lines 5-18); and

(34) wherein the at least one ethylenically unsaturated monomer is selected from the group consisting of acrylic acid, methacrylic acid, esters of acrylic acid, esters of methacrylic acid, acrylonitrile, methacrylonitrile, acrylamide, methacrylamide, and styrene (column 3, line 56 through column 4, line 2).

Regarding claim 36, Gibson et al. disclose: ***(36)*** a *auto-depositing* coating composition (Abstract; column 5, lines 29-47), comprising:

(a) at least one epoxy dispersion comprising: (i) an epoxy pre-polymer (column 5, lines 29-47; column 3, lines 9-16); (ii) at least one ethylenically unsaturated monomer polymerized through a heterophase polymerization process (column 3, line 56 through column 4, line 2; column 5, lines 29-57; column 2, lines 27-45); wherein the epoxy dispersion further comprises

particles and components (i) and (ii) are both present in one or more of the dispersion particles (column 2, lines 27-45);

(b) water (column 5, line 29 through column 6, line 18); and

(c) at least one autodeposition accelerator (column 5, line 29 through column 6, line 18; column 2, line 27 through column 3, line 16);

It should be noted that the above claims feature the term "auto-depositing." This recitation has been given little patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In the instant case, the preamble merely recites the intended use of the composition, wherein the prior art can meet this future limitation by merely being capable of such intended use.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-6, 8, 18-20, 22, 30-32, 34, 36, and 38-41 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 12-15, 24-30, 37, 39, and 40 of copending Application No. 10/903,265 (Pub. No.: US 2005/0065242 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because:

The following tables show corresponding claims of the instant invention and the invention of the copending application:

Instant	1	2	3	4	5	6	7	8	9	10	40	41
Copending	25	26	27	28	29	30	--	37	--	--	39	40

Instant	18	19	20	21	22	23	24
Copending	1	2	3	--	12	--	--

Instant	30	31	32	33	34	35
Copending	13	14	15	--	24	--

Instant	36	37	38	39
Copending	40	--	40/29	40/30

The only difference between the instant claims and the copending claims is that the copending claims further comprise "(c) at least one hydrophobic water barrier agent" in the reaction process, as well as in the overall composition (including within the diverse dispersion particles). The instant claims are broader than the copending claims, and the use of the transitional phrase "comprising" results in a claimed invention that fully encompasses the invention of the copending application.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the process and make the compositions of the instant invention because they are fully encompassed by the claims of copending application 10/903,265 (Pub. No.: US 2005/0065242 A1).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 7, 21, and 33 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 13, and 25 of copending Application No. 10/903,265 (Pub. No.: US 2005/0065242 A1) in view of Weller et al. (US Pat. No. 6,645,633) or Gibson et al. (US Pat. No. 4,413,073).

The claimed invention of the copending application is as set forth above and incorporated herein. The claims of the copending application fail to explicitly teach the additional presence of ***(7,21 & 33)*** at least one further component selected from the group consisting of colorants, pigments, coalescing solvents, level agents, and mixtures thereof.

Weller et al. *(see Abstract and claims)* and Gibson et al. *(see 102 rejection above)* teach analogous compositions/methods of making said compositions. Both references also teach that the materials set forth in instant claims 7, 21, and 33 are recognized in the art as suitable auxiliary additives for this type of composition – *see Weller et al.: column 8, line 65 through column 9, line 8; Gibson et al.: column 6, lines 5-19).*

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the materials set forth in instant claims 7, 21, and 33 in the claimed invention of the copending application because Weller et al. and Gibson et al. demonstrate that these materials are recognized in the art as suitable auxiliary additives for this type of composition.

This is a provisional obviousness-type double patenting rejection.

Allowable Subject Matter

6. Claims 11-17 and 25-29 are allowed.

7. Claims 9, 10, 23, 24, 35, and 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 9, 10, 23, 24, and 35: Gibson et al. (US Pat. No. 4,413,073) is the closest prior art; however, they fail to teach or suggest the use of at least one ethylenically unsaturated monomer that is an anionic functional monomer *(see column 3, line 56 through column 4, line 2)*.

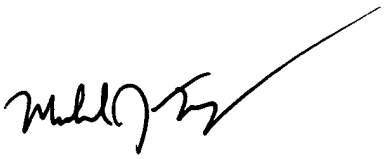
Regarding claims 11-17, 25-29, and 37-39: Gibson et al. (US Pat. No. 4,413,073) is the closest prior art; however, they fail to teach or suggest the use of at least one phosphate ester monomer *(see column 3, line 56 through column 4, line 2)*.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely
Primary Examiner
Art Unit 1712

May 2, 2005